

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number
WO 2004/090326 A1

(51) International Patent Classification⁷: F03D 1/06

(21) International Application Number:
PCT/EP2003/003813

(22) International Filing Date: 12 April 2003 (12.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicants (for all designated States except US): GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US). SCHELLINGS, Vincent [NL/NL]; Park de Kotten 160, NL-7522 EH Enschede (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DELUCIS, Nicolas [DE/DE]; Emdener Strasse 30, 48155 Münster (DE).

(74) Agents: HILLERINGMANN, Jochen et al.; Deichmannhaus am Dom, 50667 Cologne (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

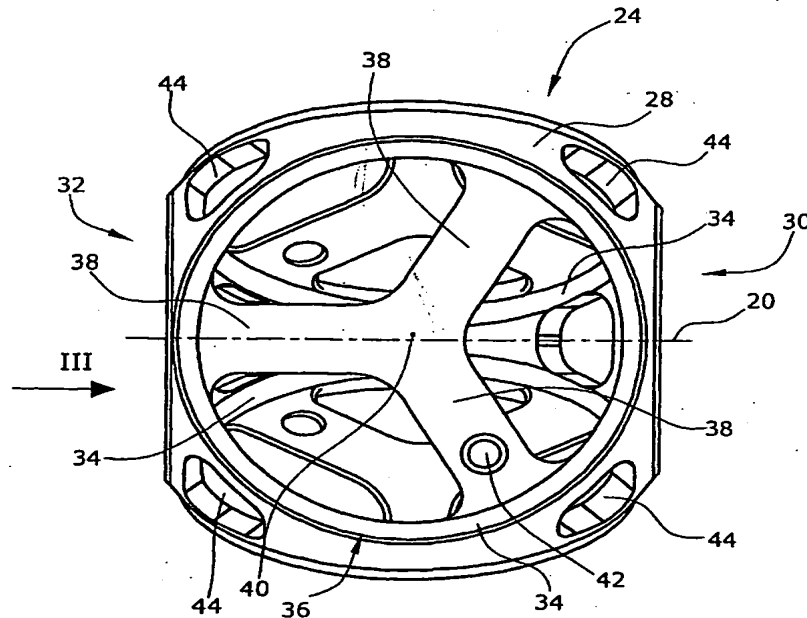
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: REINFORCED HUB FOR THE ROTOR OF A WIND ENERGY TURBINE



(57) Abstract: The hub for the rotor (22) of a wind energy turbine (10) comprises a hollow body (28) rotatable around a rotation axis and provided with at least one flange (34) for mounting to the hollow body (28) a bearing for a rotor blade (26) and at least two stiffening webs (38) integrally formed with the hollow body (28) and radially extending within a flange area (36) of the hollow body (28) surrounded by the flange (34) to the center (40) of the flange area (36), wherein at least two openings are provided within the flange area (36) of the hollow body (28).